

Do Dedicated Research Years Matter? Perspectives from Plastic Surgery Program Leadership: A Pilot Study

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Introduction

- Plastics and Reconstructive Surgery (PRS) is consistently one of the most competitive specialties in the Match
- With USMLE Step 1 transitioning to pass/fail, and residency programs focusing on a holistic review of applicants, there has been an increased emphasis on research productivity for integrated PRS applicants, often manifested as dedicated research years prior to applying to residency
- The purpose of this study is to assess PRS program leadership perspectives on dedicated research years in PRS residency applicants

Methods

- An anonymous 9-question Google forms survey (**Figure 1**) was developed to investigate PRS faculty's perception of research years in PRS applicants
- The survey was piloted with PRS faculty at the University of Colorado School of Medicine, with plans to submit for ACEPS sponsorship and dissemination to all PRS program directors and assistant program directors.

Results

Figure 1. Survey Questions

1. How long have you been in clinical practice?
< 5 years 5-9 years 10-14 years 15-19 years 20+ years
2. What is your current leadership role?
Program director Associate program director Department/Division chair Other faculty
3. How long have you been in this leadership role?
< 5 years 5-9 years 10-14 years 15-19 years 20+ years
4. What is your perception of integrated plastic surgery applicants completing a research fellowship in medical school?
Favorable Neutral Unfavorable
5. Which of the following do you believe is most indicative of research productivity? (**Choose up to two**):
Poster presentation Podium Presentation Manuscript publication
Attainment of grant funding Other (fill in the blank)
6. Would you recommend a research fellowship in basic science or clinical outcomes?
Basic science Clinical outcomes
7. What do you believe is the purpose of a research fellowship? (**Choose up to two**):
To prepare for a career in research To strengthen curriculum vitae To increase exposure to the specialty Networking experience Other (fill in the blank)
8. Who would you recommend a research fellowship to? (**Can choose multiple**):
All integrated plastic surgery applicants
Applicants without a home integrated plastic surgery program
Applicants with weak spots in their applications (i.e., Step 2 score, pre-clinical grades, etc.)
Independent plastic surgery fellowship applicants
International medical graduates
Other (fill in the blank)
9. Would you recommend one or two years of dedicated research?
One year Two years
10. Would you recommend a research fellowship at the applicant's home institution or another institution?
Home institution Away institution
11. For the unmatched integrated plastic surgery applicant, would you recommend a research fellowship or preliminary year in surgery?
Research fellowship Preliminary year in surgery

Table 1. Pilot Survey Respondent Demographics

	Value (%)
Response Rate	8 (57)
How long have you been in clinical practice?	
<5 years	4 (50)
5-9 years	2 (25)
10-14 years	2 (25)
15-19 years	0 (0)
20+ years	0 (0)
What is your current leadership role?	
Program Director	1 (12.5)
Associate Program Director	2 (25)
Department/Division Chair	1 (25)
Other Faculty	4 (50)
How long have you been in this leadership role?	
<5 years	7 (87.5)
5-9 years	1 (12.5)
10-14 years	0 (0)
15-19 years	0 (0)
20+ years	0 (0)

Table 2. University of Colorado PRS Leadership Pilot Survey Response Data

	Value (%)
Response Rate	8 (57)
What is your perception of integrated plastic surgery applicants completing a research fellowship in medical school?	
Favorable	6 (75)
Neutral	2 (25)
Unfavorable	0 (0)
Which of the following do you believe is most indicative of research productivity? (Choose up to two)	
Poster Presentation	0 (0)
Podium Presentation	2 (25)
Manuscript Publication	8 (100)
Attainment of Grant Funding	6 (75)
Other	0 (0)
Would you recommend a research fellowship in basic sciences or clinical outcomes?	
Basic Sciences	8 (100)
Clinical Outcomes	0 (0)
What do you believe is the purpose of a research fellowship? (Choose up to two)	
To prepare for a career in research	1 (12.5)
To strengthen curriculum vitae	8 (100)
To increase exposure to the specialty	5 (62.5)
Networking experiences	2 (25)
Other	0 (0)
Who would you recommend a research fellowship to? (Can choose multiple)	
All integrated plastic surgery applicants	2 (25)
Applicants without a home integrated plastic surgery program	5 (62.5)
Applicants with weak spots in their applications (i.e. Step 2 scores, pre-clinical grades, etc.)	7 (87.5)
Independent plastic surgery fellowship applicants	2 (25)
International medical graduates	5 (62.5)
Other	0 (0)
For the unmatched plastic surgery applicant, would you recommend a research fellowship or preliminary year in surgery?	
Research fellowship	6 (75)
Preliminary year in surgery	2 (25)
Do you believe that dedicated research prior to residency correlates with academic productivity during residency?	
Agree	3 (37.5)
Neutral	3 (37.5)
Disagree	2 (25)

Discussion

- Most respondents' overall perception of dedicated research years prior to PRS residency application was "Favorable," while the rest were "Neutral"
- All respondents perceived manuscript publication as the highest level of research productivity followed by attainment of grant funding
- All respondents agreed that the primary reasons to complete a research fellowship were to strengthen an applicant's curriculum vitae and to increase exposure to the specialty
- All respondents recommended a research fellowship in clinical outcomes as opposed to basic science
- Respondents would recommend research fellowships to applicants with weak spots in their application as well as applicants without a home PRS program and international medical graduates
- For unmatched PRS applicants, most respondents recommended a research fellowship as opposed to a preliminary year in surgery
- The "Comments" section of the survey elicited two additional survey questions (questions 9 and 10)

Conclusions

- PRS faculty across all demographics generally have a favorable perception of integrated PRS applicants completing a research fellowship.
- PRS leadership would recommend a clinical research fellowship for students who do not have a home integrated PRS program, who have weak spots in their applications, and who are international medical graduates.
- Research productivity, especially in the form of manuscript publication and attainment of grant funding, is becoming increasingly important for PRS applicants.